

## STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY LANSING



DAN WYANT . DIRECTOR

October 29, 2013

Ms. Shari Kolak Remedial Project Manager United States Environmental Protection Agency Region 5 77 West Jackson Boulevard Chicago, Illinois 60604-3590



Dear Ms. Kolak:

SUBJECT:

Preliminary Comments to the Second Five-Year Review Report (5YR), West KL

、Avenue Landfill Superfund Site, Kalamazoo, Michigan

Michigan Department of Environmental Quality (MDEQ) staff would like to see the following issues included in the upcoming 5YR for the West KL Avenue Landfill Superfund site:

The Second Amendment to the Record of Decision (ROD) for the West KL Avenue Landfill Superfund site, dated September 12, 2005, included requirements for constructing a composite landfill cap, required a county municipal ordinance be put in place to restrict groundwater use. and approved the use of monitored natural attenuation (MNA) as the site remedy for the groundwater. The second ROD amendment stated that a complete evaluation of the effectiveness of the source control and MNA will be completed every five years after initiation of construction of the landfill cap. Consequently, the first MNA evaluation was completed in September 2010. As we indicated in our February 2011 review comments on the first MNA evaluation report submitted by the potentially responsible parties (PRPs), it appears that the groundwater plume has expanded since the MNA remedy was implemented and additional water resources have been affected. The MDEQ does not agree with the conclusion of the December 2010 Five-Year Performance Monitoring Report which claims that the remedy has been successful and is protective. The evaluation has not conclusively demonstrated that MNA is being successful in preventing the further spread of contaminants or in reducing contaminant concentrations. To the contrary, there is clear indication that the plume is expanding and is not stable.

Contingency measures must be implemented as soon as possible to prevent further plume expansion.

The following are issues and recommendations that should be identified in the upcoming 5YR Report:

## Issues:

- The full extent of the groundwater contamination northwest of the landfill is unknown.
- The plume appears to be expanding to the northwest of the site.
- Additional sentinel wells are needed northwest of the landfill to provide early warning of potentially vulnerable private water supply wells.
- MNA, as the sole groundwater remedy, is not meeting expectations at this site. There is an apparent expansion of groundwater contaminants not amenable to biodegradation (1,4-Dioxane and Tetrahydrofuran [THF]).

- There is the possibility of methane gas accumulation in soil well outside of the landfill perimeter, (potentially having been evolved from the groundwater) that should be
- There is the possibility of certain pharmaceuticals (based on past disposal practices) in groundwater that should be evaluated.

## Recommendations:

- Further investigate the plume's leading edge (west of 1st Street) to determine the full extent of contamination.
- Further investigate the area to determine the full extent of groundwater contamination and to confirm that the plume is expanding to the northwest.
- The PRPs. KL Landfill Group, should submit a work plan for additional sentinel wells and sample the wells for the appropriate parameters.
- An evaluation of effectiveness of MNA should be conducted. The PRPs should provide an annual evaluation of contaminant trends at the landfill boundary. If necessary, develop a Contingent Remedial Action Plan to have in place in the event of remedy
- The KL Landfill Group should prepare a plan to test for methane in soil gas at nearby residences on a recurring basis, perhaps annually.
- The KL Landfill Group should investigate whether pharmaceuticals have been released to the groundwater from the landfill.

We would appreciate the opportunity to review and provide input on the upcoming draft 5YR report once it becomes available.

If you would like to discuss our comments, please contact me at your convenience.

Sincerely.

Waleiign Wagaw **Project Manager** 

Superfund Section

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CC: Ms. Sheri Bianchin, United States Environmental Protection Agency

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